WHAT IS CLAIMED IS:

1. A method of data multiplex broadcasting, which comprises multiplexing data to be transmitted and a code that changes its state in synchronism with respective starts of content elements expressed by said data, and broadcasting said data and said code which are multiplexed.

2. A method of data multiplex broadcasting, which comprises: multiplexing data to be transmitted, a code that changes its state in synchronism with starts and ends of a series of content elements expressed by said data, and a code that changes its state in accordance with divisions between said content elements, and broadcasting said data and said codes which are multiplexed.

3. A method of data multiplex broadcasting, which comprises: multiplexing data to be transmitted and a code expressing a number of content elements that have been transmitted out of a series of content elements expressed by said data, and broadcasting said data and said code which are multiplexed.

4. A method of data multiplex broadcasting, which comprises: multiplexing data to be transmitted and a code expressing a number of content elements that are not

transmitted yet out of a series of content elements expressed by said data, and broadcasting said data and said code which are multiplexed.

5. The method of data multiplex broadcasting according to Claim 3, wherein a code that changes its state in accordance with starts and ends of said series of content elements is further multiplexed with said data.

6. The method of data multiplex broadcasting according to Claim 4, wherein a code that changes its state in accordance with starts and ends of said series of content elements is further multiplexed with said data.

7. A method of data multiplex broadcasting, which comprises: multiplexing data expressing broadcast contents and a code that changes its state in synchronism with a point of time at which input sources becoming said broadcast contents are switched, and broadcasting said data and said code.

8. A switcher, comprising:

an input interface means for receiving data through a plurality of lines;

a line selection means for selecting data of some one line out of data received by said input interface means

through said plurality of lines, said line selection means including a code generating means for generating a code whose state is changed in synchronism with a change of said lines; and

an output interface means for transmitting data received by said line which is selected by the line selection means and said code.

9. A source controller, comprising:

a control means for controlling a plurality of information output devices, at least concerning their starting of output;

a switching means for selecting some one information output device out of said plurality of information output devices; and

a signal generating means for outputting a signal whose state is changed in synchronism with a point of time at which said switching means switches the information output device to be selected.

10. A source controller, comprising:

a control means for controlling a plurality of information output devices, at least concerning their starting of output;

a switching means for selecting some one information output device out of said plurality of information output

devices; and

a signal generating means for deciding contents of programme associated information inclusive of a code that changes its state in synchronism with a point of time at which said switching means switches the information output device to be selected, and for generating a signal indicating said decided contents.

11. A data multiplex system, comprising:

a plurality of information output devices;

a source controller;

a programme configuration information generating means for generating programme configuration information in accordance with a signal supplied from said source controller;

an encoding means for receiving output information from an information output device selected by said source controller, and for generating encoded data;

a multiplexing means for multiplexing the encoded data generated by said encoding means and the programme configuration information generated by said programme configuration information generating means, and for generating multiplex signal;

a modulating means for modulating the multiplex signal generated by said multiplexing means; and

a transmitting means for broadcasting the multiplex

signal modulated by said modulating means.

12. A receiving device for receiving data multiplex signal, comprising:

an extracting means for extracting a music piece broadcast end bit and an M/S flag from a multiplex signal, said music piece broadcast end bit being reversed in its logic being synchronized with an end of a music piece broadcasted, and said M/S flag indicating music or speech; and

an outputting means for outputting a signal indicating a division between music pieces, in synchronism with a point of time at which said music piece broadcast end bit is reversed in its logic in a state that said M/S flag indicates music.

13. A receiving device for receiving data multiplex signal, comprising:

an extracting means for extracting an information bit indicating a number of remaining music pieces to be broadcasted and an M/S flag indicating music or speech;

a signal generating means for generating a signal that indicates a value indicated by said information bit, when said M/S flag indicates music.

14. The receiving device according to Claim 12, wherein:

said signal generating means outputs a signal indicating an end of broadcasting a music piece, in synchronism with change of a value indicated by said information bit.

15. A system controller for controlling a receiving device and recording device which are interconnected, wherein:

said receiving device extracts data to be transmitted and a code indicating an ordinal number from a received signal, said code corresponding to each content element out of a series of content elements expressed by said data, and said receiving device outputs said extracted data and code; and

said system controller comprises:

an interface means for receiving an operation of designating an ordinal number corresponding to some one out of the series of content elements; and

a control means for causing the recording device to start to record, when said code indicating the designated ordinal number is inputted.

16. A recording device for receiving data multiplex signal and recording contents of said data multiplex signal, comprising:

a recording means for recording data;

an interface means for receiving an instruction to start recording;

an extracting means for extracting data expressing contents and a divisional signal concerning contents of said data, from the data multiplex signal received;

a buffer memory means for storing said extracted data and said divisional signal over a certain period;

a detecting means for detecting a point of time at which a state of the divisional signal stored in said buffer memory means changes; and

a transfer means for supplying data stored in said buffer memory means since said detected point of time at which the state of the divisional signal changed, to said recording means, when the instruction is received by said interface means.

17. The recording device according to Claim 16, further comprising:

a display means for displaying a time period obtained by subtracting a period elapsed from said detected point of time at which the state of the divisional signal changed from said certain period for which said buffer memory means can store the data.